Oregon TECH

2015-2016 Academic Assessment Report

Prepared by

The Director of Assessment,
The Chair of the Executive Committee of the Assessment Commission,
and
The Executive Committee of the Assessment Commission

June 3, 2016

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Academic Assessment Report 2015-2016
Oregon Tech Assessment Commission

Introduction
This report outlines Oregon Tech assessment activities and accomplishments during the 2015-2016 academic year and is based on the goals set in the 2015-2016 Academic Assessment Plan. This document was prepared by the Director of Assessment, Sandra Bailey, and by the Chair of the Executive Committee of the Assessment Commission, Veronica Koehn, and it was reviewed by the Executive Committee of the Assessment Commission, submitted to the Provost, and posted on the Oregon Tech web site at www.oit.edu/assessment.

Leadership of Academic Assessment Efforts
During 2015-2016, Veronica Koehn was named the Chair of the Executive Committee of the Assessment Commission well as the full Assessment Commission. The Chair and Director worked closely together to coordinate assessment efforts. Membership of the Assessment Commission and Executive Committee is listed in Appendix A.

The Director of Academic Excellence was responsible for overall planning, budgeting, organizing, faculty development, and coordination of activities required for an effective and comprehensive educational assessment program. These activities included determining and evaluating learning outcomes, incorporating outcomes into curriculum planning, and providing regular and systematic feedback leading to documented program improvements. The Director worked closely with the Assessment Commission to administer essential outcomes assessment and with academic departments to administer program outcomes assessment. The director also serves as a liaison between the Executive Committee and other campus bodies engaged in institutional level assessment activities.

Communication of Assessment Matters
Systematic and broad communication on assessment matters is accomplished through the following avenues:
- The Director of Academic Excellence is a voting member of the Provost's Council, Curriculum Planning Commission, Commission on College Teaching and the General Education Advisory Council.
- The Director periodically updates the Deans and the Provost on important junctures in Oregon Tech's structured process and on assessment matters in general.
- The Director regularly communicates with assessment coordinators through email, formal meetings, training on assessment topics, and regular consultations and work sessions.
- The Executive Committee of the Assessment Commission meets regularly and includes broad representation from the campus, including the assessment representative from each of the ESLO committees (Appendix B). The Chair

writes and disseminates annual assessment reports, as detailed in the Assessment Reporting section below.
- The Chair and Director ensure that assessment information is shared with appropriate campus bodies, as detailed in the Assessment Reporting section below.

Assessment Reporting
The Chair is charged with writing and disseminating the following annual reports, to be completed during each academic year:
- Annual Academic Assessment Plan
- Annual Report on Academic Assessment Activities
- Annual Report of ESLO Assessment (ESLO committees will periodically provide information for this report)

Upon completion, these reports will be posted on the Provost's web site and announced to the faculty and administration, including the President's Office.

The Chair and the Director ensure that the following assessment information is shared with faculty during the fall convocation period:
- Essential Student Learning Outcome (ESLO) assessment results from the previous academic year
- Prior year assessment accomplishments and plans for the upcoming academic year
- Other institutional assessment results, such as the Beginning College Survey of Student Engagement (BCSSE) and the National Survey of Student Engagement (NSSE).

The commission completed the following reports and posted them on the Provost's web site:
- 2015-2016 Academic Assessment Plan (October)
- 2015-2016 Academic Assessment Report (this report—June)

In addition, a report on involvement in Multi-State Collaborative to Advance Learning Outcomes Assessment (MSC) is available upon request from the Office of Academic Excellence.

The commission ensured, per the assessment plan, that the following 2014-2015 assessment information was shared with faculty during the Fall 2015 convocation:
- 2014-2015 MSC participation and findings
- Assessment Plans for 2015-2016, including Diverse Perspectives pilot and continued involvement in MSC

Liaison with Other Campus Bodies Engaged in Assessment
- The Director serves as a liaison to other campus bodies engaged in institutional-level assessment activities. In particular, the director works with Student Affairs to ensure that BCSSE and NSSE reports are shared with appropriate groups. These results were shared with the Executive Committee in Fall 2015.

Assessment and Curriculum Matters
- As noted above, the director is a voting member of the Curriculum Planning Commission (CPC). In this role, the director reads all curriculum proposals, attends CPC meetings, and provides an assessment perspective to the work of CPC.
- The director ensures that appropriate assessment questions are included in the CPC manual for faculty members who are preparing CPC documents. The director provides consultation to faculty members and ensures that final CPC documents for new programs and significant revisions of existing programs contain program mission, objectives, student learning outcomes, and adequate assessment plans.

Assessment and General Education

As the co-chair of the General Education Review Task Force (GERTF), the Director was actively engaged in the ongoing work of this group. This year the GERTF led the work of the six standing committees that represent the new Essential Student Learning Outcomes (Appendix C).

The GERTF finished its 3-year efforts in April 2016, and the roll-out of the new ESLO cycle will be handed over to the Academic Excellence Coordinating Committee (the Director of Academic Excellence, the Chair of Assessment, the Chair of GEAC, the co-chairs of CCT, and the Deans). The Assessment Commission remains closely involved in this ESLO work as it progresses.

Resources in Support of Assessment

The Provost's Office provides budget and staff resources to the Assessment Commission and to departments to help design, revise, implement, and evaluate assessment programs. The Provost also provides funding for assessment activities as needed and standardized national surveys.

Institutional Assessment

As noted above, the Executive Committee of the Assessment Commission guides campus efforts in institutional academic assessment. One major focus of these efforts is the ongoing assessment of the newly revised and recently rolled-out ESLOs. The committee provides a cycle for assessment of the ESLOs, and, in conjunction with the ESLO committees, establishes the performance criteria, and distributes tools for assessment at both institution and program levels. The ESLOs and the current assessment schedule are shown in Table 1. The details for each step appear in Appendix D.

ESLO		1	2	3	4	5	6
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Communication		Design	Analyze	Plan	Engage	Evaluate	Reflect
Inquiry and Analysis			Design	Analyze	Plan	Engage	Evaluate
Ethical Reasoning				Design	Analyze	Plan	Engage
Teamwork		Engage	Evaluate	Reflect	Design	Analyze	Plan
Quantitative Literacy	Analyze	Plan	Engage	Evaluate	Reflect	Design	Analyze
Diverse Perspectives	Design	Analyze	Plan	Engage	Evaluate	Reflect	Design

Table 1. ESLO Schedule

The committee reviews and disseminates reports from assessment of the ESLOs and makes recommendations for changes in curriculum and general education requirements as appropriate. In addition, the committee works with the Commission on College Teaching to develop and administer faculty professional development opportunities to support student attainment of ESLOs. A detailed description of the ESLOs, annual ESLO reports, and the cycle of ESLO assessments are posted on the Oregon Tech web site at www.oit.edu/provost/ESLO.

In addition to assessment of ESLOs, the Executive Committee tracked other institutional assessment activities, described below, and ensured liaison and dissemination of information between campus bodies.

Oregon Tech uses standardized tests to assess student learning at entry. Math and writing placements are made based on the results of these tests, selected major, GPA, years of completed math, and transfer credit. All students can challenge their placement by taking the Educational Testing Service's Accuplacer exam. The Accuplacer will further assess the student's entry-level mathematics and writing skills. The results are summarized in Oregon Tech's Student Status Report, along with demographic information, SAT/ACT scores, and student responses to college readiness questions. Working with the Student Status Report, advisors meet with incoming students to insure each student has been placed into the appropriate math and writing classes. The Math and Communication Departments track student success and the appropriateness of math and writing placements.
Oregon Tech assesses entry-level readiness and demographic characteristics of new students every three years through use of the Beginning College Survey of Student Engagement (BCSSE) national survey instrument.   This information was shared with

the Assessment Commission, the Commission on College Teaching, the General Education Advisory Council, Admissions, the Student Affairs staff, and the Oregon Tech faculty.

Oregon Tech assessed the level of student engagement at the freshmen and senior levels through use of the online National Survey of Student Engagement (NSSE). The results from this survey are shared with the Assessment Commission, the Commission on College Teaching, the General Education Advisory Council, the Student Affairs staff, and the Oregon Tech faculty.

Oregon Tech's Student Success Center conducts an annual graduate status survey and reports on the employment status, continuing education, and earnings of recent Oregon Tech graduates.

Table 2 summarizes Oregon Tech's regularly scheduled institutional assessment activities.

Students/Instruments	Cycle of Assessment	Last Administered	Next Administered	Responsible Office
New Students				
BCSSE[1]	Every 3 years	Fall 2014	Fall 2017	Student Success Center
Math/writing placement exams	Every term			Student Success Center
Enrolled Students				
NSSE[2]	Every 3 years	Spring 2015	Spring 2018	Assessment
Oregon Tech ESLOs	Every year			Assessment
Follow up to BCSSE & NSSE	Every 3 years	Spring 2013	Fall 2016	Assessment
Senior Exit Surveys	Every year			Assessment
Alumni				
Graduate Survey	Every year			Student Success Center

Table 2. Schedule of Oregon Tech Institutional Assessment Activities

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[1] BCSSE: Beginning College Survey of Student Engagement collects data about entering college students' high school academic and co-curricular experiences as well as their expectations for participating in educationally purposeful activities during the first college year.

[2] NSSE: National Survey of Student Engagement measures engagement in six High-Impact Practices and provides ten Engagement indicators.

Implementation of the 2015-2016 Assessment Plans

The committee completed the following institutional assessment work during the 2015-2016 academic year:

- *Executive Committee Assessment Efforts*
    - Completed the 2015-16 assessment plan.
    - Completed the 2015-16 assessment report (this report).
    - Reviewed and updated the charter as needed.
    - Provided assessment orientation for new faculty at September Institute.
    - Provided training for new assessment coordinators.
    - Planned 2016-17 ESLO assessment activities.
    - Coordinated with GERTF and campus community on continuation of 6-year cycle.
    - Worked with Student Affairs to disseminate results of the 2014 BCSSE and 2015 NSSE surveys.
    - Tracked continuous improvement activities at the program level.
    - Worked with the Commission on College Teaching to coordinate assessment work and faculty professional development.
    - Continued work with the Advising Commission to heighten awareness of both students and advisors regarding Oregon Tech's ESLOs.
    - Began implementation of LiveText assessment software and provided training for early adopters.
- *Diverse Perspectives ESLO*
    - Administered ESLO assessment of Diverse Perspectives to provide a baseline for this outcome.
    - Faculty used LiveText to assess Diverse Perspectives and collect student artifacts.
    - Currently working on report detailing pilot procedures and findings. The report will be completed and disseminated during fall term 2017.
- *State and National Assessment Efforts*
    - Followed the work of the statewide Learning Outcomes and Assessment Committee. The Director of Academic Excellence is a member of the committee.
    - Reviewed and discussed state- and national-level accountability trends and the potential impact for Oregon Tech.
    - Increased the visibility of assessment work at Oregon Tech through presentations at national meetings.
        - Sandra Bailey was a co-presenter for a workshop on assignment design at the Assessment Institute in October 2015.
        - Kevin Brown, Maria Lynn Kessler, Sandra Bailey, and Veronica Koehn attended the AAC&U General Education Outcomes and Assessment Convention in February 2016.
        - Maria Lynn Kessler, Aja Bettencourt-McCarthy, and Kristen Konkel participated in the NILOA Assignment Design Charrette at the same time and location. Sandra Bailey participated as a facilitator for this event.

- o *Multi-State Collaborative to Advance Learning Outcomes Assessment*
  - Provided faculty with the results of Oregon Tech's participation in the Multi-State Collaborative (MSC) in 2014-15.
  - Coordinated with the Commission on College Teaching to provide professional development for faculty associated with the findings from the MSC.
  - Supported MSC training of three faculty who were trained as scorers for the MSC: Sharon Beaudry, Kari Lundgren, and Mehmet Verkac, who later led the norming and scoring session at the Pre-Convocation workshop in Fall 2015.
  - Coordinated collection of student artifacts for Oregon Tech's participation in the 2015-2016 MSC Demonstration Year. Artifacts were uploaded to be scored using AAC&U's *Written Communication, Quantitative Literacy, Critical Thinking, and Intercultural Knowledge and Competence* VALUE rubrics.
- *NWCCU Accreditation 7-Year Self-Study and Site Visit*
  - o The Director and the Executive Committee contributed to the self-study describing academic assessment processes and curricular changes which resulted from assessment efforts.
  - o Members of the site visit team commented on the well-established assessment processes and "Culture of Assessment" at Oregon Tech.
  - o The visit and follow-up report confirmed a few concerns/areas for improvement that the Executive Committee had previously identified and begun to remedy (in part with the implementation of LiveText). The concerns and planned improvements of the Committee are as follows:
    - The site visit team members raised concerns about the program assessment reporting, noting that many reports were "heavy on narrative, but light on analysis." The new LiveText software allows for richer data analysis, and the Committee is developing a reporting template which emphasis analysis.
    - The peer-review report called for a process to review both institutional and program assessment reports and procedures. Along with the report template in LiveText the Executive Committee is working towards building a peer review process using a rubric and allowing for written feedback on the various components of program reports. The program assessment coordinators will then have the opportunity to revise reports before they are accepted, finalized, and published to the website.
    - The site visit team noted that less than half of program reports included evidence of improvements resulting from assessment efforts. The LiveText report template will track program improvements from year to year prompting follow-up on planned actions and re-assessment for evidence of improvement.

Program Assessment
The Executive Committee of the Assessment Commission provided overall guidance to the campus for its ongoing program assessment efforts. The institution requires that all undergraduate and graduate degree programs create a manageable assessment plan, focusing on program-specific learning outcomes created by each academic department and informed by relevant constituencies.

Many of Oregon Tech's programs have discipline-specific accreditation. In most cases, the assessment requirements for specialized accreditation are congruent with Oregon Tech requirements. Where possible, Oregon Tech encourages faculty to use the assessment reports submitted to these separate bodies as their assessment report for Oregon Tech as well.

The Director provided the departments with a variety of support for program assessment efforts, including formal meetings of the Assessment Commission, regular one-to-one work sessions and consultations with coordinators, training on assessment topics, regular reminders of assessment tasks and timelines, feedback on assessment efforts, and tracking of progress by each program.

The Executive Committee recommended that each program perform at least three assessment measures for each PSLO under review—two direct measures at the upper division level and one indirect measure to accompany one of the direct measures. Beyond these guidelines, the faculty were free to select the assessment measures that are deemed most appropriate for each program.

2015-2016 Assessment Work
During the 2015-2016 year, the committee continued the structured program assessment process using a strategy centered on submission of small assignments at regular intervals in an ongoing report, including these items:
- Organized an annual convocation meeting for program faculty to review prior assessment decisions and activities and to plan assessment work for the upcoming year.
- Reviewed program mission, educational objectives, and student learning outcomes.
- Updated a three-year rotational plan for assessing student learning outcomes.
- Mapped each student learning outcome to the program curriculum, indicating where the outcome is taught and where it can be assessed.
- Developed/reviewed performance indicators for 2015-2016 student learning outcomes scheduled for assessment.
- Planned for direct and indirect measures of 2015-16 student learning outcomes scheduled for assessment. Began to input assessment plan in the institutional assessment software.
- Implemented and re-assessed planned improvements from prior year assessment work.
- Began to utilize the institutional assessment software to compile program assessment records, including student work samples.

- Submitted periodic assessment write-ups, including data summaries, evaluation of data, and action plans for program improvement.
- Organized a spring department meeting to review assessment data and made plans for program improvement.
- Prepared a final assessment report for the learning outcomes web site.
- Will collect and analyze senior exit data this summer.

During winter and spring terms, the coordinators continued to execute their 2015-2016 assessment plans. In addition to their core assessment activities, the coordinators also completed the following tasks:
- Organized a spring department meeting to review assessment data and make plans for program improvement
- Submitted periodic additions of data summaries, evaluations and action plans to the ongoing assessment report
- Collected and analyzed senior exit data
- Wrote a final assessment report

Summary
During the 2015-2016 academic year, Oregon Tech continued its systematic work in assessment. The institution made significant progress in advancing assessment efforts at both institutional and program levels. The major accomplishments for the year were:
- Campus-wide roll-out of six Essential Student Learning Outcomes
- Adoption of revised six-year assessment cycle, adding deliverables connected to six standing ESLO committees
- Collecting pilot data for the Diverse Perspectives ESLO
- Continued participation in the MSC national project to assess student learning
- Formative implementation of a new assessment software
- Connection of campus work to national trends though NILOA assignment design and MSC scoring
- Completion of all planned assessment reports

As the Executive Committee concludes the academic year, the committee looks forward to the 2016-2017 year. During convocation we will recap our participation in the MSC, present results of the Diverse Perspectives pilot, and goals for continuous improvement based on the NWCCU self-study and site visit. We will revisit the annual assessment plan in early fall, and goals for the year will be established. In addition, we will implement institutional assessment of Communication and fully integrate LiveText into our already mature assessment process. The Executive Committee is pleased with the integrated culture of assessment at Oregon Tech and the connection with national trends that these accomplishments reflect.

Appendix A
Assessment Commission Membership
2015-2016

Executive Committee
Sandra Bailey, Director, Academic Excellence
Maria Lynn Kessler, Humanities and Social Science
Veronica Koehn, Chair, Communication
Don McDonnell, Medical Imaging Technology
Hallie Neupert, Management
Sean St Clair, Civil Engineering
Mehmet Vurkac, Electrical Engineering and Renewable Energy

Assessment Coordinators Committee
Seth Anthony, Science General Education
Sharon Beaudry, Management BS
Ben Bunting, Humanities General Education
Kerry Byrne, Environmental Sciences BS
Cara Calvo, Clinical Lab Sciences BS
Barry Canaday, Echocardiography BS
Chris Caster, Vascular Technology BS
Robyn Cole, Diagnostic Medical Sonography BS & Degree Completion
Jan Cope, Dental Hygiene BS & Degree Completion
Hope Corsair, Renewable Energy Engineering MS
David Culler, Mechanical Engineering Technology BS
Jeff Dickson, Health Informatics BS
James Eastham, Systems Engineering BS
Steve Edgeman, Manufacturing Engineering Technology BS
Jim Fisher, Applied Mathematics BS
Suzanne Hopper, Dental Hygiene AAS
Phil Howard, Software Engineering Technology AE & BS
Rick Hoylman, Nuclear Medicine Technology BS
Jim Hulse, Respiratory Care Degree Completion
Janette Isaacson, Echocardiography & Vascular Technology Degree Completion
Teshome Jiru, Renewable Energy Engineering BS
Jamie Kennel, Paramedic Education AAS & BS
Veronica Koehn, Communication Studies BS
Kristen Konkel, Applied Psychology BS
Roger Lindgren, Civil Engineering MS
Kari Lundgren, Communication General Education
Doug Lynn, Computer Engineering Technology AE & BS
Mason Marker, Geomatics BS
Don McDonnell, Radiologic Science BS
Sophie Nathenson, Social Sciences Gen Ed & Population Health Management BS
Hallie Neupert, Health Care Management BS
Molly O'Shaughnessy, Biology-Health Sciences BS
Jeff Pardy, Respiratory Care BS
Jane Perri, Polysomnographic Technology AAS
Scott Prahl, Optical Engineering BS
Joe Reid, Mathematics General Education
Kris Rosenberg, Information Technology BS
Troy Scevers, Embedded Systems Engineering Technology BS
Pat Schaeffer, Operations Management BS
Aaron Scher, Electronics Engineering Technology BS
Maureen Sevigny, BAS in Technology & Management
Sean St Clair, Civil Engineering BS
Joe Stuart, Manufacturing Engineering Technology MS
Mehmet Vurkac, Electrical Engineering BS
Gary Zimmerman, Radiologic Science Degree Completion

Appendix B
ESLO Committee Membership
2015-2016

Communication
Christopher Syrnyk, Chair
Roger Lindgren
Elizabeth Gordon
Aja Bettencourt-McCarthy
Kevin Brown

Teamwork
Trevor Petersen, Co-chair
Dan Peterson, Co-chair
Kevin Brown
Evelyn Hobbs
Don McDonnell
Josie Hudspeth
Dongbin Lee

Inquiry and Analysis
Seth Anthony, Chair
Ryan Madden
Jeff Pardy
Matt Sleep
Kelly Peterson-Fairchild
Mehmet Vurkac

Ethical Reasoning
Yasha Rohwer, Chair
Travis Lund
Franny Howes
Jim Hulse
Mike Pierce

Quantitative Literacy
Randall Paul, Chair
Matt Beekman
Richard Bailey
Kari Lundgren
Tara Guthrie
Gregg Waterman

Diverse Perspectives
Ben Bunting, Chair
Barry Canaday
Dibyajyoti Deb
Sharon Beaudry
Veronica Koehn
Hope Corsair
Deanne Pandozzi

Oregon Tech's Essential Student Learning Outcomes

Oregon Tech's Essential Student Learning Outcomes (ESLOs) support Oregon Tech's institutional mission and core themes. The outcomes and associated criteria reflect the rigorous applied nature of Oregon Tech's degree programs.

The ESLOs reflect the common expectations about the knowledge, skills, and abilities that Oregon Tech students will acquire and are reflected in the General Education requirements that lay the foundation upon which the major curricula build. Engaging in these ESLOs will support Oregon Tech graduates in developing the habits of mind and behaviors of professionals and lifelong learners.

COMMUNICATION

ESLO 1: Oregon Tech students will communicate effectively orally and in writing.

Definition

Communication is the creation, development, and expression of ideas. The Communication ESLO differentiates between oral and written communication. The two forms of communication operate much the same but differ in the criterion *Style and Delivery* because of their differing forms of expression.[3] Both forms of communication involve purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in attitudes, values, beliefs, or behaviors.

Criteria for Communication Assessment

The following are criteria used in the assessment of student work:
- Purpose: Focus and connections made in presentation of evidence.
- Audience: Adjustments in presentation made for differing levels of knowledge and expertise among listeners and readers.
- Evidence: Support provided by research and disciplinary knowledge.
- Genre and Disciplinary Conventions: Adjustments in structure and order made for various fields and forms of presentation.
- Style and Delivery:
  - Oral Communication: Techniques including posture, gesture, eye contact, and vocal expressiveness.
  - Written Communication: Control of syntax and mechanics, as well as craft in choices of phrasing, vocabulary, and structure.
- Visual Communication: Support provided by visual presentation integrated with oral or written content.
- Justification: Self-assessment and support of choices made in communication.[4]

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[3] Oral communication differs from the Teamwork ESLO because oral communication focuses on an individual speaker presenting, not on interaction. Oral and written communication are assessed individually.

[4] This may be a separate assignment from the written or oral assignment used to assess the other criteria; this justification piece will ask the students to reflect on the deliberate choices they made during the composition process. While this is most often an implicit process, it will be made explicit for the purpose of assessment of at least one piece of written or oral communication.

INQUIRY AND ANALYSIS

ESLO 2: Oregon Tech students will engage in a process of inquiry and analysis.

Definition

Inquiry and analysis consists of posing meaningful questions about situations and systems, gathering and evaluating relevant evidence, and articulating how that evidence justifies decisions and contributes to students' understanding of how the world works.

Criteria for Inquiry and Analysis Assessment

The following are criteria used in the assessment of student work:
- Identify: Identify a meaningful question or topic of inquiry.
- Investigate: Examine and critically evaluate existing knowledge and views on the topic of inquiry.
- Collect: Design and execute a means of collecting evidence
- Evaluate: Analyze evidence obtained in their investigation.
- Conclude: Draw conclusions based on analysis of evidence; grasp the limitations and implications of their analyses.

ETHICAL REASONING

ESLO 3: Oregon Tech students will make and defend reasonable ethical judgments.

Definition

Ethical reasoning is the process of recognizing which decisions require ethical judgments, determining potential reasonable courses of action, finding support for potential courses of action, and then selecting the course of action best supported.

Criteria for Ethical Reasoning Assessment

The following are criteria used in the assessment of student work:
- Differentiate: Explain the differences between ethics and laws.
- Recognize: Recognize decisions requiring ethical judgments.
- Support: Support potential courses of action (via major ethical theories/principles, applicable ethical codes of conduct, etc.) and select the best-supported course of action.
- Apply: Apply ethical reasoning to novel situations.
- Evaluate: Identify and critically evaluate applicable code(s) of ethics and identify common ethical issues in their field.
- Articulate: Articulate a code of personal ethics.

TEAMWORK

ESLO 4: Oregon Tech students will collaborate effectively in teams or groups.

Definition

Teamwork encompasses the ability to accomplish group tasks and resolve conflict within groups and teams while maintaining and building positive relationships within these groups. Team members should participate in productive roles and provide leadership to enable an interdependent group to function effectively.

Criteria for Teamwork Assessment

The following are criteria used in the assessment of student work:
- Identify and Achieve Goal/Purpose: Share common goals and purpose.
- Assume Roles and Responsibilities: Fulfill roles and responsibilities, including leadership roles, which are clearly defined and shared. Members are motivated to complete work in a timely manner and provide leadership in meetings.
- Communicate Effectively: Communicate openly and respectfully, listen to ideas, and support and encourage each other.
- Reconcile Disagreement: Welcome disagreement and use difference to improve decisions.
- Contribute Appropriately: Contribute to discussions, decision-making, and work. The work product is a collective effort.
- Develop Strategies for Effective Action: Use effective decision making processes to decide on action, share expectations for outcomes, and reach consensus on decisions.
- Adjust for Differences: Recognize and adapt to differences in background and communication style.

QUANTITATIVE LITERACY

ESLO 5: Oregon Tech students will demonstrate quantitative literacy.

Definition

Quantitative literacy comprises the ability to appropriately extract, interpret, evaluate, construct, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in students' everyday professional, civic, and personal lives.

Criteria for Quantitative Literacy Assessment

The following are criteria used in the assessment of student work:
- Calculate: Perform mathematical calculations correctly (and evaluate/confirm that they have done so).
- Interpret: Extract and interpret quantitative information presented in various commonly used forms (e.g., equations, graphs, diagrams, tables, prose).
- Construct Representations: Convert relevant quantitative information and data into different forms as appropriate (e.g., equations, graphs, diagrams, tables, prose).
- Apply in Context: Apply appropriate quantitative methods, draw justified conclusions, evaluate claims, and make decisions based on quantitative information. Make and evaluate key assumptions in estimation, modeling, and data analysis.
- Communicate: Effectively and accurately communicate quantitative information in writing and verbally using representations (e.g., equations, graphs, diagrams, tables, prose) that are appropriate for their intended audience.

DIVERSE PERSPECTIVES

ESLO 6: Oregon Tech students will explore diverse perspectives.

Definition

Recognition of diverse perspectives requires the self-awareness, intellectual flexibility, and broad knowledge that enables perception of the world through the eyes of others.[5] This includes the awareness and understanding of the customs, practices, and viewpoints of varied cultures, individuals, and identities.

Criteria for Diverse Perspectives Assessment

The following are criteria used in the assessment of student work:
- Recognize: Show awareness of one's own perspectives.
- Know: Demonstrate factual knowledge of the foundations of diverse perspectives.
- Understand: Display understanding of others' perspectives.
- Apply: Apply factual knowledge and understanding of diverse perspectives to their interactions with others.

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[5] i.e., from the perspectives of diverse cultures and personalities, with consideration of varied places, histories, and technologies.

Appendix D
Draft Six-Year Cycle and Work Plan for ESLO Subcommittees
Oregon Institute of Technology

Year 1: Design Assessment
Develop assessment plan identifying research questions targeting various levels of proficiency. The following tasks should be considered in developing the plan: review ESLO criteria, review ESLO mapping to the curriculum, develop or review rubrics, identify the potential need for professional development prior to assessment, develop signature assignments, and review past assessment reports. Set appropriate benchmarks for student attainment at various levels. Plan submitted to the Assessment Executive Committee for approval and the General Education Advisory Council for inclusion in the Essential Studies program annual assessment report.

Year 2: Analyze Data
Aggregate and analyze data as defined in the assessment plan. Identify potential changes for continuous improvement considering both curricular changes and professional development. Submit written report summarizing findings to the Assessment Executive Committee, the Commission on College Teaching, and the General Education Advisory Council for inclusion in the annual Essential Studies assessment report.

Year 3: Plan Improvements
Create action plan for improvement relating to curriculum including recommendations for curricular change, changes to ESLO criteria and/or rubrics, and changes to course approval process. Submit action plan to the General Education Advisory Council for approval and coordinate implementation with the appropriate bodies. The General Education Advisory Council will include the action plan in the annual Essential Studies program assessment report.

Design professional development to be implemented in year four based on plan for improvement considering ways to engage the university community including faculty, staff and students. In developing this plan research best practices and opportunities to collaborate with other institutions. Submit plan to the Commission on College Teaching.

Year 4: Engage the University
With the Chair of the Assessment Commission, present report of findings from year-two and planned improvements from year-three to the university at fall convocation. Coordinate with the Commission on College Teaching to launch the university-wide focus on outcome through professional development based on plan for improvement engaging faculty, staff and students. The Commission on College Teaching will provide the General Education Advisory Council with a summary of professional development activities to include in the annual Essential Studies Assessment Report.
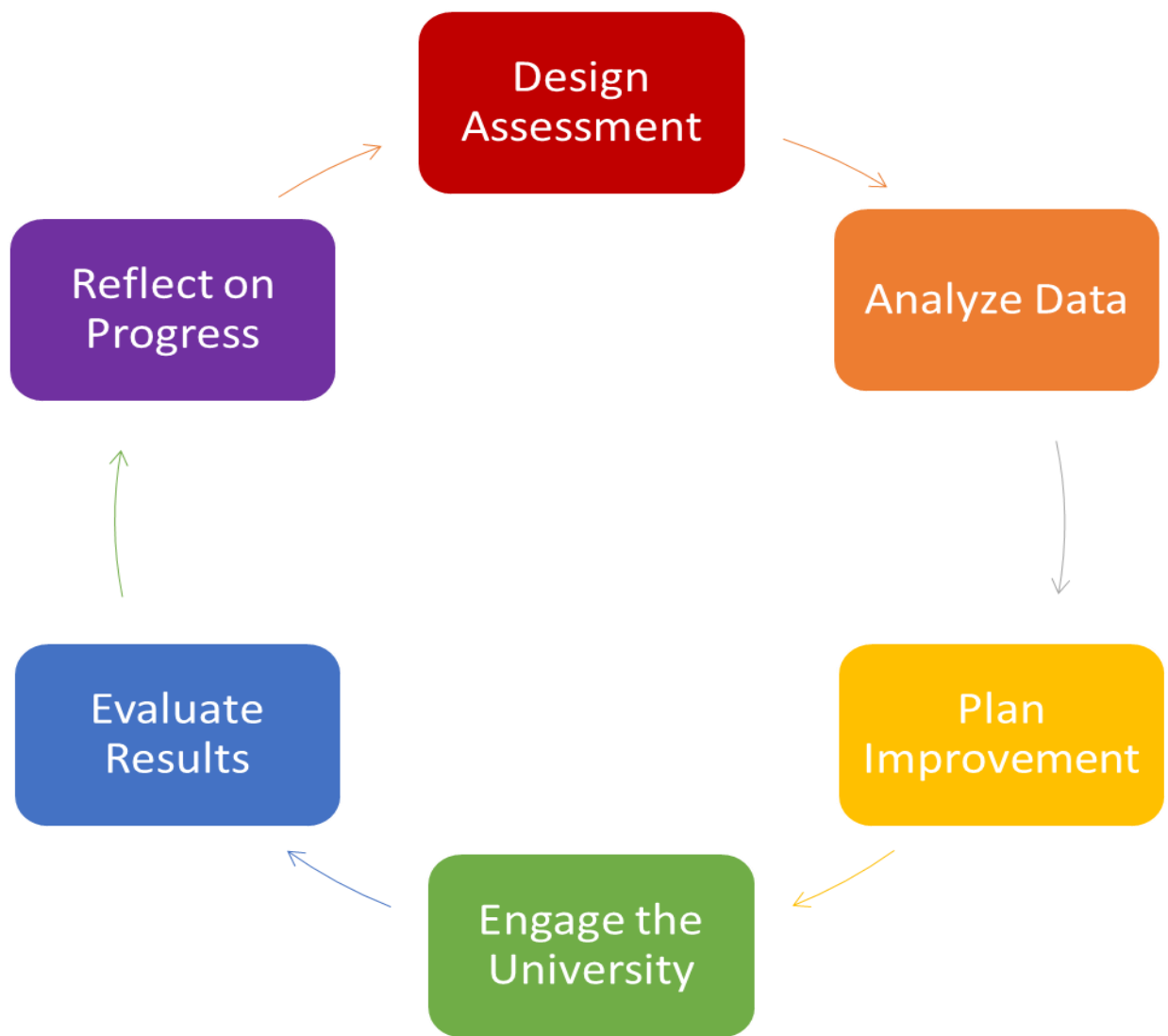
Year 5: Evaluate Results
Aggregate and analyze data from targeted areas of weakness identified in the year-two report. Report areas of improvement and/or recommendations for additional actions to the Assessment Executive Committee, the Commission on College Teaching, and the General Education Advisory Council for inclusion in the annual Essential Studies program assessment report.

Year 6: Reflect on Progress
Reflect on improvements and consider innovative options for increasing success of all students. Activities could include: mapping outcome and criteria to state and national frameworks, comparing results to state and national benchmarks, looking at innovative teaching and assessment practices at other institutions, exploring possibilities for collaborations and involvement in state and national projects, seeking opportunities for grant funding to support plans for innovation. Submit reflection to the Assessment Executive Committee, Commission on College Teaching, and the General Education Advisory Council for inclusion in the annual Essential Studies program assessment report.

Continuous Improvement Cycle

Six-Year ESLO Cycle

		1	2	3	4	5	6
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Communication		Design	Analyze	Plan	Engage	Evaluate	Reflect
Inquiry and Analysis			Design	Analyze	Plan	Engage	Evaluate
Ethical Reasoning				Design	Analyze	Plan	Engage
Teamwork		Engage	Evaluate	Reflect	Design	Analyze	Plan
Quantitative Literacy	Analyze	Plan	Engage	Evaluate	Reflect	Design	Analyze
Diverse Perspectives	Design	Analyze	Plan	Engage	Evaluate	Reflect	Design

Assessment Reporting for the Essentials Studies Program

Annual Assessment Report
The General Education Advisory Council (GEAC) will prepare an annual assessment report of the Essential Studies program for submission to the Assessment Executive Committee, Academic Council and the Provost. This report will include the activities of each of the six ESLO subcommittees in the current year, therefore reporting on each of the six phases of the cycle. The Essential Studies Annual Assessment report will be shared with the university community and posted to the assessment website.

I. Introduction
   Leadership of the Essential Studies Program (ESP)
   Communication of ESP to students, faculty, advisors, potential students, etc.
   Coordination with other campus bodies, Assessment Commission, Commission on College Teaching, Advising commission, Academic Council, the Registrar, Curriculum Planning Commission, Oregon Tech Online, Admissions, Student Affairs, etc.
   Resources to support the ESP
II. Purpose, objectives and outcomes of the ESP
   List purpose, objectives, and outcomes, summarize reviews, note changes and justification
III. Six-year cycle of assessment of the ESP
IV. Summary of activities of GEAC for the year
V. Summary of current academic year assessment activities of the ESLO subcommittees
   Assessment Plan: assessment plan for ESLO to be assessed in coming academic year
   Evidence of student learning: Aggregated results and analysis of ESLO assessed in current year

Program improvements: Action plan based on analysis of ESLO in last year
Faculty professional development: Description of professional development activities related to ESLO highlighted in current year
Evidence of improvement: Aggregated results and analysis following implementation of action plan in past year
Changes resulting from assessment: Reflection on improvements as a result of assessment cycle

VI.   Conclusion
Summary of work for the academic year, significant findings, recommendations for permanent program changes, etc.

VII. Appendices
ESLO course matrices
Rubrics
Signature assignments

ESLO Report

The Assessment Executive Committee will prepare a summary report for each ESLO at the conclusion of the six-year cycle (one ESLO report prepared each year). This report will combine the information included in the Essential Studies program report over the past six years. Reports will be submitted to the Academic Council, the Provost, and posted on the assessment website.

I.   Executive Summary
II.   Outcome, definition and criteria for assessment
       List outcome statement, definition, and criteria for assessment
       Summarize reviews, note changes and justification
III.   Six-year cycle of assessment of the ESLO
IV.   Assessment Plan
V.   Evidence of student learning
       Description of assessment including data collection and scoring
       Assessment results and analysis
VI.   Changes resulting from assessment
       Program improvements implemented
       Description of professional development activities related to ESLO
       Evidence of improvement; results and analysis following implementation of actions
VII. Reflection on progress
       Reflection on improvements and plans for innovation looking to next six-year cycle
VIII. Assessment Reporting
       Description of university-wide communications and coordination with other campus bodies over the six-year cycle
IX. Appendices
       ESLO course matrices
       Rubrics
       Signature assignments
       Faculty reflections
       Membership of ESLO subcommittee over the past 6 years